

acute front edge; the rings of shields in front of the sternal disk formed of unequal but symmetrical polygonal shields.

*DALOPHIA WELWITSCHII.*

*Monotrophis capensis*, Günther, MS. B.M. (not A. Smith).

Pale brown.

*Hab.* Angola; Pungo Andongo (*Welwitsch*). B.M.

4. DESCRIPTION OF SIX NEW SPECIES OF EXOTIC BUTTERFLIES  
IN THE COLLECTION OF THE BRITISH MUSEUM. BY A. G.  
BUTLER, BRITISH MUSEUM.

(Plate XXVI.)

1. *PIERIS PACTOLICUS.* (Pl. XXVI. fig. 1.)

*Upperside.* Front wings, basal half white; apical half, inner portion of anterior margin, and base grey; exterior edge of front margin and outer margin rich brown; nervures, except the base of the third median nervule and nearly the whole of the submedian nervure, brown. Posterior wings white, with broad bicoloured outer margin; the anal half grey; the apical half rich brown, forming sinuations with the nervules, which are also brown for nearly their entire length. Body silver-grey.

*Underside.* Front wings white, yellow at the base and apex; anterior margin greyish; all the nervures, except the interior portions of the third median nervule and the submedian nervure, deeply bordered with rich brown, the brown margins of the nervules gradually widening at the extremities into a marginal band; a brown spot crossing in the centre between the first and second discocellular, and another between the first and second median nervules. Posterior wings bright yellow, greyish on the outer margin; all the nervures deeply bordered with rich brown, except at the end of the cell, which gives it the appearance of being open; lower portion of folds between the median nervules and submedian nervure brown, and terminated inwardly by brown lunules, their concavities towards the base. Body dark grey.

*Hab.* ~~Bogota~~ *Bogota*.

2. *PIERIS CRUENTATA.* (Pl. XXVI. fig. 2.)

*Upperside.* Front wings white, with faint roseate reflection; apical edge rich brown, tapering nearly to the anal angle, and enclosing two small hastate, longitudinal, cream-coloured spots, and two barely perceptible dots of the same colour on either side of them; anterior margin brown, sprinkled with white scales near the base. Posterior wings white, with faint roseate reflection; base sprinkled with a few black scales; outer margin rich brown; anal portion faintly showing the markings of the underside. Body—prothorax and mesothorax olivaceous; metathorax and upper half of abdomen blue grey; anal portion white.

*Underside.* Front wings white, yellowish at base; anterior margin brown; apical edge rich brown, tapering nearly to the anal angle, and crossed near its centre by a band of five spots (the lowest one a mere speck), the three upper ones yellow, the other two white. Posterior wings, basal half yellow, and inner margin broadly yellow; apical half white; outer margin with a broad rich brown marginal band, widest at the anal angle, and tapering to a point at the apex; crossed by a band of scarlet, interrupted by the nervures, beginning at the inner anal edge, and crossing the band obliquely to near the extremity of the first median nervule, and thence upwards through the centre of the band to the apex.

*Hab.* Mysol.

This species is closely allied to *Pieris mysis*, Godt. (Australia). The points of distinction are as follows:—

*Pieris cruentata.*

*Upperside.* Front wings much more suddenly angulated; front margin more curved; hind margin much shorter; apical band beginning much nearer the apex, and only enclosing two full-sized spots, which are yellow instead of white. Posterior wings much longer; marginal band not sinuated on its inner edge.

*Underside.* Front wings, anterior brown margin not running gradually into the apical band, but meeting it at a sharp angle; spots on apical band not all white, as is usually the case with *P. mysis*. Posterior wings much more suffused with yellow, which is paler, and softened off into the white, instead of terminating abruptly; marginal band only extending from the anal angle to the apex, not continued halfway up the interior margin.

3. *PIERIS VECTICLUSA.* (Pl. XXVI. fig. 3.)

*Upperside.* Front wings cream-colour, ferruginous at the base; apical edge rich brown, tapering nearly to the anal angle, sinuated on its inner edge, and enclosing a nearly triangular yellow spot, its point touching the anterior margin; a broad brown band at the end of the cell, widest on the anterior margin, and terminated at the median nervure. Posterior wings deeper cream-colour, slightly ferruginous at the base; rich brown along the outer margin; an oblique band showing through from the underside, crossing the wing, at the end of the cell, from the anterior to the inner margin near the anal angle. Body ferruginous.

*Underside.* Front wings cream-colour, deeper towards the base; anterior and basal half of the cell bright orange; apical edge rich brown, tapering nearly to the anal angle, sinuated on its upper edge, and enclosing a nearly oval, oblique, ochreous spot, its upper end touching the front margin; a broad brown band at the end of the cell, widest on the anterior margin, and terminated at the median nervure. Posterior wings ochreous, basal portion greyish; base orange, interrupted by the nervures; an oblique brown band crossing the wing at the end of the cell from the anterior to the interior margin, near the anal angle, its upper extremity slightly widening

along the front margin; a band of brown, irregularly denticulated on its inner side, along the outer margin. Body brown.

*Hab.* —?

4. *PIERIS AVIVOLANS.* (Pl. XXVI. fig. 4.)

*Upperside.* Front wings bright yellow; anterior margin and base of the nervures black; a small black spot at the end of the cell; a quadrate olivaceous spot between the cell and anterior margin, halfway between the base and the apex; a second quadrate olivaceous spot, also touching the anterior margin, halfway between the first spot and the apex; nervules black at their outer extremities, and surrounded with olivaceous blotches; the black anterior margin interrupted by yellow within the extremities of the nervules; five olivaceous lunules near the outer margin between the nervules, the first and fourth nearly halfway between the outer margin and the cell, the fourth little more than a spot. Posterior wings bright yellow; outer margin deeply sinuated, especially near the anal angle, where the second and third median nervules terminate in short obtuse tails, that of the second median being the longer of the two; outer extremities of the nervules black. Body brown, densely clothed with coarse silvery and yellow hair.

*Underside.* Front wings creamy ochreous, cell and apical half deeper-coloured; anterior margin and base of the nervures black; an irregular black spot at the end of the cell; a nearly triangular black spot between the cell and anterior margin, halfway between the base and the apex; a second black spot, oblique, elongate, touching the anterior margin, halfway between the first spot and the apex; nervules greenish, black at their outer extremities, and almost connected by a marginal termination of brown scales; five narrow black lunules near the outer margin between the nervules, the first three placed obliquely, the third one nearest to the outer margin, the fourth irregular, on a level with the first, the fifth on a level with the third. Posterior wings creamy ochreous, increasing in depth towards the base and inner margin; nervures, except the second and third median nervules, faintly black for their entire length; two contiguous lunules close to the base above the costal nervure, their concavities towards the costal nervure; an elbowed black marking just beyond the lunules, and touching the anterior margin, its angle towards the outer margin; the costal and subcostal nervures densely black at the base, a black spot near the base between them; a transverse band between the costal nervure and subcostal nervule, halfway between the base and the apex, and forming an angle with a black termination to the costal nervure; a second minute transverse band crossing them close to the apex, and continuing in an oblique zigzag to the second subcostal; five transverse angulated black bands, resembling birds in flight, between the other nervules, the first, third, and fifth halfway between the margin and the cell, the second and fourth only half as far from the margin as the others; cell enclosing three elongate black spots, two in the centre, placed obliquely, the third near the end of the cell, placed longitu-

dinally; basal end of median nervure broadly black internally; a black spot at the end of and within the cell, crossing halfway between the discocellular nervules; interior extremities of second and third median nervules, end of cell between them, and between the first and second clothed with black scales; a black angular lunule between the interior extremity of the third median nervule and the submedian nervure, but only extending to the interneurial fold; both ends of the fold black; a transverse spot of black between the fold and the submedian nervure near the base, and a small transverse band near the anal angle, extending to the fold between the submedian and the internal nervules; another band between the fold and the internal nervure, which is broadly black on its outer edge near the centre; all the nervures of the outer and interior margins with sagittiferous outer extremities. Body pale ochreous.

*Hab.* Mexico\*.

5. *GONEPTERYX URANIA.* (Pl. XXVI. fig. 5.)

*G. wallichii*, Doubl.?

*Upperside.* Front wings pale yellow, deeper at the outer margin; anterior margin much curved, and ending at its outer extremity in a sharp, uncatenated apical point; outer margin slightly sinuated on its upper edge; apex brown, deeply sinuated and dentated; a large, perfectly circular, deep-brown spot between the first and second submedian nervules. Posterior wings somewhat quadrate, pale yellow, deeper at the outer margin.

*Underside.* Front wings dirty yellow, paler on the inner margin; discoidal cell irrorated with brick-red; a small irregular silver spot surrounded with red in the middle of the end of the cell, with a minute vertical lunule just above it; the costal and subcostal nervures ending in small red spots; a somewhat triangular silver dash on the anterior margin, close to the apex; a large ferruginous round spot, ending below in a fine oblique red line, between the first and second submedian nervules; two small, longitudinal, oblong, pale-brown spots placed obliquely between it and the silver apical dash. Posterior wings dirty yellow; cell irrorated with brick-red, a small irregular silver spot, surrounded with red, in the middle of the end of the cell, with a minute red lunule just above it; a small brown lunule above the end of the cell, and halfway between it and the anterior margin; a band of oblong pale-brown spots crossing the wing between the nervules, and following the direction of the outer margin.

*Hab.* Northern India.

6. *CALLIDRYAS BRACTEOLATA.* (Pl. XXVI. fig. 6.)

*Upperside.* Front wings sulphur-yellow, pale roseate at the base; anterior margin convex; apex and nervules of outer margin faintly tipped with brown; a faintly indicated deeper-yellow spot near the

\* Nearly allied to *Hesperocharis graphites* ♂, Bates (from the central valleys of Guatemala), Ent. Month. Mag. vol. i. pt. 2. p. 33, but, as it seems to me, not identical.

inner end of each of the folds between the nervules; a large deep-brown spot at the end of the cell. Posterior wings sulphur-yellow, the base, inner margin, and cilia pale roseate; inner margin deeply emarginate at its lower edge for more than one-third of its length, and forming a long caudate projection with the outer margin, which slopes gradually from the apex to the anal angle; a faint orange spot at the end of the cell, and another smaller spot of the same colour above it and just beyond the cell; an indistinct yellow spot at the inner end of each of the folds between the nervules. Body pale roseate, with yellow hair on the thorax; head and antennæ brown.

*Underside.* Front wings pale ochreous, with deeper-coloured front, margin, and cilia; wings sparsely irrorated with orange; a few black scales between the costal nervure and the cell; base tricoloured, the interior portion red, the middle bright ochreous, the exterior, which with the lower wings forms almost a complete circle, greenish grey; nervures bright yellow; two dull copper-brown oval spots, faintly margined with black, placed one beneath the other at the end of the cell, the lower one about six times as large as the upper, with a silver outer edge; a silver, oblong, oblique dash near the inner end of each of the folds between the nervules, those between the first and fourth subcostals slanting towards the outer margin, those between the fourth subcostal and the third discocellular slanting towards the interior margin, and forming an oblique band; the spots between the median nervules running parallel to, but outside, this band; outer extremities of the nervules black, those on the outer margin sprinkled with silver scales. Posterior wings pale ochreous, gradually increasing in intensity towards the base; wings irrorated with orange; a few black scales, intermingled with silver, placed obliquely just beyond the end of the cell; base tricoloured, the interior portion ochreous sprinkled with red, the middle bright ochreous, the exterior greenish grey; a quadrate silver spot surrounded with orange at the end of the cell, and another smaller spot placed obliquely to and just above it; eight small, oblong, silver dashes crossing transversely between the nervules, near the inner end of the folds, each of them with a few brown scales in the centre; nervules yellow, greenish near the base, their outer extremities tipped with black and surrounded with silver; all the silver markings on the underside are distinctly raised above the surface of the wings. Body ochreous.

*Hab.* Brazil.

5. DESCRIPTION OF A NEW SPECIES OF GOULDIA FROM PORT JACKSON. BY GEORGE FRENCH ANGAS, CORR. MEMB.

GOULDIA AUSTRALIS, Angas.

*G. t. parva, suborbiculari, crassiore, vix tumida, pallide rufocastanea; plerumque radiis duobus albidis, extus et intus plus minusve se monstrantibus; umbonibus prominentibus, antice flect-*